

TAMPER-EVIDENT LABEL

FIELD OF THE INVENTION

[0001] The present invention is directed to a tamper-evident label suitable for placement on a container and cap assembly.

BACKGROUND OF THE INVENTION

[0002] Tamper-evident labels are useful for alerting consumers of products marketed in bottles and containers that the product might have been opened prior to sale thereof at the retail level. These labels have been placed on prescription and over-the-counter pharmaceutical products, cosmetics, alcoholic beverages, and the like.

[0003] When damaged, tamper-evident labels provide visible proof that a container and closure assembly has been tampered with or opened. Generally, this type of label will show signs of breakage or wrinkling when the closure is rotated relative to the container because relative fixed position of the container and cap has been changed from the position fixed by the manufacturer. The breakage or wrinkling of the label provides indication to a consumer that the product might have been opened prior to sale thereof. The prior art provides many aspects of tamper-evident and resistant labels.

[0004] U.S. Pat. No. 958,887 to Parmele teaches a sealed receptacle having a body and cover, wherein a label secured by adhesive material to both the body and cover. A series of 'bonds' cover the interface where the body and cover meet. The bonds are large circular-shaped perforations, wherein the interface can be seen there through.

[0005] U.S. Pat. No. 2,272,262 to Carter suggests a strip stamp useful for covering the mouth of the neck of a bottle and cap. After an adhesive is placed on the underside of the strip, the strip is attached over the cap and bottleneck.

[0006] U.S. Pat. No. 3,983,645 to Rycroft discloses a tamper-proof label adapted to be applied to joined surfaces of a thermoplastic member and heat-sealed in place. The label is cut in predetermined locations on each side of the adjoining surfaces, and contain indicia to identify a product in the thermoplastic member. Upon opening the thermoplastic member, the label is separated into two distinctive parts.

[0007] U.S. Pat. No. 4,450,101 to Kutcher discloses a container assembly including a tamper-indicating band. The assembly is characterized as a container having a closure covering an opening of the container and includes a skirt, and a tamper-indicating band overlying the skirt. The band is characterized as an array of obliquely slanted score lines spaced apart from one another. Removal of the closure from the container by grasping the band and manually twisting breaks or visibly distorts at least one of the strips.

[0008] U.S. Pat. No. 4,640,427 to Marino et al discloses a tamper-resistant thermoplastic closure for containers such as bottles wherein the closure has a continuous thread pattern engagable on a matching continuous thread pattern on the container or snap-on fastening configuration, wherein a tab attaches to the container and the cap. The tab is characterized as having a tear-away portion so that when the container and cap are separated parts of the tab remains with the container and cap.

[0009] U.S. Pat. No. 5,048,711 to Weiss et al discloses a label indicator for a screw thread closure characterized as a label applied in an overlapping relation to the closure and container. The label has two areas that can be separated and alignment indicators on the two areas that are unaligned. In use, after the label has been applied, the closure is removed by unscrewing, breaking the label. Thereafter, when the closure is reapplied, the closure is overtightened to align the previously unaligned alignment indicators of the label to insure a leak-free container system after the closure has been reapplied.

[0010] U.S. Pat. No. 5,217,307 to McClintock discloses a tamper-safety label easily applicable to a container and closure means to disclose the opening of the container. The label is characterized as a face stock extending over a closure line between a container and a closure having a tear strip with a tab formed thereon to divide the stock into two parts so that when the strip is torn.

[0011] U.S. Pat. No. 5,495,944 to Lerner discloses a sealed tamper-evident label characterized as a bottle having a frangible label connected to the side wall portion of the bottle; a wrapper having an upper portion that overlies the cap and a lower portion that overlies the bottle and at least a portion of the label so that the cap is sealably fixed to the bottle. Removal of the wrapper lower portion ruptures the frangible label, wherein the rupture serves as visible indicia of the removal of the wrapper bottom portion from the bottle and alerts the consumer to possible tampering.

[0012] U.S. Pat. No. 5,727,819 to Grosskopf discloses a resealable laminated package label having a tamper-resistant feature. The invention may be further characterized as a multipanel information leaflet having a tab attached thereto. The leaflet is affixed to the bottom portion of a container and the tab is affixed to the top of a container and top assembly such that relative displacement between the container and cap results in displacement of the leaflet and tab.

[0013] While the prior art is replete with tamper-resistant and tamper-evident labels suitable for use on a variety of containers for pharmaceuticals, cosmetics, beverages, etc., there is a need for a tamper-evident label that is easily removable from a container by the consumer, and easily evident of tampering and opening after manufacture but prior to sale.

SUMMARY OF THE INVENTION

[0014] The present invention is directed to a tamper-evident label suitable for affixing a container and cap assembly, the cap being removably attached to the container, said container having a bottom, side walls, a mouth, and top edge adjacent to the mouth, said cap having a top, side wall, and bottom edge adjacent to the mouth of the container, wherein a spacing void exists between the walls of the container and cap, the label being characterized as:

[0015] a) a planar sheet having a tear strip defined by two parallel perforated lines there through defining upper and lower panels, the tear strip overlaying the void between the container and cap assembly walls, extending over the top edge of the container and the bottom edge of the cap, said upper panel, being suitable for attachment to the cap, having at least two tabs extending over the side walls of said cap, said